

**IN THE CLAIMS:**

1. (Currently amended) A device for reduction of organic sulphur from high sulphur coal, comprising:
  - a movable cabinet,
  - a tubular furnace enclosed in the cabinet,
  - a reactor inside the furnace and including
    - a steam heating zone capable of maintaining a temperature in the range of 400 ~~450-500~~ degree Celsius,
    - a promoter zone for heating a promoter mixture of copper-iron turnings in a ratio of 1:9 therein, the promoter zone being capable of maintaining a temperature in the range of 950-1100 degree Celsius, and
    - a reaction zone for reacting the high sulphur coal with a steam, the reaction zone being capable of maintaining a temperature in the range of 900-950 degree centigrade, wherein the tubular furnace is capable of providing the temperatures required by the zones of the reactor.
2. (Previously presented) A device as claimed in claim 1 wherein the tubular furnace is made of Silliminite and insulated by quartz wool.
3. (Withdrawn) A process for removal of organic sulphur from high sulphur coal using the device as claimed in claim 1 comprising
  - heating the promoter zone containing a promoter at a temperature in the range of

1100±50 degree Celsius and the steam zone at a temperature in the range of 450 to 500 degree Celsius,

crushing an input coal to -72 mesh BS and

feeding the crushed coal into the reaction zone,

producing steam in a flask and passing the steam through the reactor,

maintaining the temperature at 900 degree Celsius for about 1 hour, after it attains a temperature of about 900 degree Celsius, passing the gas evolved from the reactor through a series of bubblers containing ammoniacal cadmium chloride solution,

cooling the furnace to room temperature and

discharging a product coke/char.

4. (Withdrawn) A process as claimed in claim 3, wherein the promoter is mixture of copper-iron turnings in the ratio of 1:9.

5. (Withdrawn) A process as claimed in claim 3 further comprising increasing the temperatures in the promoter zone and the reaction zone at a rate of 5 degree Celsius per minute.

6. (Withdrawn) A process as claimed in claim 3 wherein around 80% sulphur from the coal is removed by the process.

7. (Previously presented) A device as claimed in claim 1, wherein the steam heating zone has a length of 17 mm.

8. (Currently amended) A device as claimed in claim 1, wherein the promoter heating zone has a length of 250 ~~205~~ mm.

9. (Previously presented) A device as claimed in claim 1, wherein the reaction zone has a length of 200 mm.

10. (New) A device as claimed in claim 1, wherein the tubular furnace has an outer diameter of 250 mm.

11. (New) A device as claimed in claim 10, wherein the tubular furnace has an internal diameter of 40 mm.

12. (New) A device as claimed in claim 1, wherein the tubular furnace has a length of 650 mm.

13. (New) An apparatus for reduction of an organic sulphur from a high sulphur coal, comprising:

a movable cabinet,

a tubular furnace enclosed in the cabinet,

a reactor inside the furnace and including:

a flask for producing and passing steam through the reactor;

a promoter zone for heating a promoter mixture to a temperature of between 950 to 1100 degree Celsius, the promoter zone comprising a promoter mixture of copper-iron

turnings in a ratio of 1:9; and

a reaction zone comprising the high sulphur coal that can react with the steam passing through the reactor to reduce the organic sulphur from the high sulphur coal;  
wherein the furnace heats and maintains:  
a steam zone of the reactor at between 400 to 550 degree Celsius;  
the promoter zone at between 950 to 1100 degree Celsius; and  
the reaction zone at between 900 to 950 degree Celsius.

14. (New) A device according to claim 13, wherein the high sulphur coal to be fed into the reaction zone is 72 mesh.

15. (New) A device according to claim 13, further comprising a series of bubblers containing an ammoniacal cadmium chloride solution.